

LPDES PERMIT NO. LA0007439, AI NO. 83898, ACTIVITY NO. PER20070002

**LPDES FACT SHEET AND RATIONALE
FOR THE DRAFT LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM
(LPDES) MODIFIED PERMIT TO DISCHARGE TO WATERS OF LOUISIANA**

COMPANY/FACILITY: Entergy Louisiana, Inc.
Waterford 1 & 2 Generating Plant
17420 River Road
Montz, Louisiana 70068-9008

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

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Water Permits Division
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DATE PREPARED: July 30, 2007

1. PERMIT STATUS

- A. Reason For Permit Action:
Modification of an existing Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term following regulations promulgated at LAC 33:IX.3105.

LAC 33:IX Citations: Unless otherwise stated, citations to LAC 33:IX refer to promulgated regulations listed at Louisiana Administrative Code, Title 33, Part IX.

40 CFR Citations: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations in accordance with the dates specified at LAC 33:IX.4901, 4903, and 2301.F.

- B. LPDES permit: LA0007439
LPDES permit effective date: June 1, 2006
LPDES permit expiration date: May 31, 2011
- C. Modification request received: May 21, 2007

2. FACILITY INFORMATION

- A. LOCATION – 17705 River Road, LA Hwy 18 in Killona, St. Charles Parish
(Latitude: 29° 59' 58" Longitude: 90° 28' 33")
- B. FACILITY TYPE/ACTIVITY – Entergy Louisiana, Inc., Waterford 1 & 2 Generating Plant is a steam electric generating station. Electricity is generated using two fossil-fired units with a combined maximum capacity of 836 megawatts (MW). No. 6 diesel is used as a secondary fuel source for Units 1 and 2 with an additional capability of combusting No. 2 diesel. The primary fuel source for both units is natural gas; however, the facility is dispatched frequently to burn No. 6 Fuel Oil (Bunker C).

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Natural gas is supplied through five (5) pipelines with cathodic protection that access the facility's property from the south to the west. The gas separating/processing stations located onsite scrub and remove petroleum distillates from the fuel lines. Fuel Oil is supplied by barge and distributed through a series of piping that traverse the facility.

Cooling water is provided by the Mississippi River via a 96-inch diameter intake line. Upon entering the plant, river water is circulated through the condenser tubes for each turbine to remove process heat. A portion of this cooling water is also treated and used as process water throughout the plant. The intake water is not currently chlorinated and has not been chlorinated in over ten years.

C. FEE RATE

1. Fee Rating Facility Type: Major
2. Complexity Type: III
3. Wastewater Type: I
4. SIC code: 4911

3. NATURE AND BASIS OF MODIFICATION

This permit is being modified to incorporate the installation of a new simple cycle combustion turbine/generator at the facility and the remanding of major portions of the 316(b) Rule on January 25, 2007.

A. The description of wastewater streams for Outfall 002 has been changed to: the intermittent discharge of treated effluent from plant washdown areas including stormwater runoff from the turbine, generator, transformer, and boiler areas; hydrostatic test waters from Internal Outfall 108; equipment washdown, maintenance wastewaters, low and high potential stormwater from Units 1&2; vehicle rinse wastewaters; and wash down waters, low potential stormwater and maintenance wastewaters from Unit 4. The current limitations are sufficient for the additional wastewaters. The maximum 30 day average flow (0.175 MGD), treatment, and outfall location did not change.

B. The 316(b) language has been modified to include the following:

- July 6, 2004, EPA promulgated 'Phase II' regulations in accordance with section 316(b) of the Clean Water Act (CWA).
- January 25, 2007, the Second U.S. Circuit Court of Appeals remanded several provisions of the Phase II rule.
- March 20, 2007, EPA issued a memo saying, "the rule should be considered suspended".
- July 9, 2007, Federal Register notice suspending all parts of the Phase II regulations except 40 CFR 125.90(b) [LAC 33:IX.4731.B]

LAC 33:IX.4731.B provides for regulating the CWIS for existing facilities on a case-by-case basis using best professional judgment.

In order to reduce the environmental impact caused by the cooling water intake structure (CWIS), the permittee shall comply with effective regulations

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promulgated in accordance with section 316b of the CWA for cooling water intake structures. The permittee must evaluate the environmental impacts of their CWIS by characterizing the fish/shellfish in the vicinity of the CWIS and assessing impingement mortality and entrainment. Based on the information submitted to DEQ, the permit may be reopened to incorporate limitations and/or requirements for the CWIS.

The fish/shellfish impingement mortality and entrainment assessment must include the following:

1. Source water physical data including a narrative description, scaled drawings, location maps showing the physical configuration of the source water body, and other documentation which supports your assessment of the water body;
2. Cooling water intake structure data including a narrative description of the configuration, location, engineering drawings, and operation of your CWIS, including design intake flow velocity; flow distribution, and water balance diagram that includes all sources of water to the facility, recirculating flows, and discharges;
3. Cooling water system data including a narrative description of the operation of your cooling water system, its relationship to the CWIS, the proportion of the design intake flow that is used in the system, the number of days of the year the cooling water system is in operation and seasonal changes in the operation of the system, if applicable; and
4. Source water biological evaluation which includes the fish/shellfish assessment and the impingement mortality/entrainment assessment.

4. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for discharges described in the application.

5. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the proposed issuance of LPDES individual permits and may request a public hearing to clarify issues involved. This Office's address is on the first page of the fact sheet. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

A local newspaper of general circulation and
 The Office of Environmental Services Public Notice Mailing List.

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